

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A process for making a disposable diaper formed from a composite web and a liquid-absorbent laminated panel attached to an inner side of said composite web, said process comprising the steps of:

feeding a continuous first web and a continuous second web having a transverse dimension larger than a corresponding dimension of said first web in a machine direction under tension in said machine direction while feeding continuous waist elastic members stretched at a predetermined ratio in said machine direction so as to be laid along transversely opposite side edges of said first web;

placing said first and second webs upon each other so that transversely opposite side edges of said second web extend outwardly of the transversely opposite side edges of said first web, then attaching said elastic members to an inner surface of at least one of said first and second webs and joining said first and second webs to each other to form a composite web;

placing a plurality of said panels each extending in a cross direction on said first web at regular intervals in said machine direction and joining to said first web;

folding zones of said second web extending outwardly of the transversely opposite side edges of said first web inward in a cross direction along the side edges of said first web and joining the folded zones of said second web to said first web and to end zones of said panel in the cross direction;

cutting transversely middle zones of said composite web each extending between each pair of said panels which is adjacent to each other along each of first cutting lines generally describing a circle and folding said composite web inward together with said panels in the cross direction along the machine direction with said panels lying inside; and

joining respective halves of said composite web folded inward together in a vicinity of each of second cutting lines extending in the cross direction on both sides of said first cutting line and cutting said composite web together with said elastic members along said second cutting lines to form a plurality of said diapers arranged in the machine direction.

2. (Original) The process according to Claim 1, further including an coating first adhesive zones each continuously extending in the machine direction along each of the transversely opposite side edges of said second web on an inner surface of said second web with adhesives while coating second adhesive zones extending in the machine direction so as to be spaced one from another by a predetermined dimension in the machine direction and lying between said first adhesive zones and the adjacent side edges of said first web with adhesives, respectively, on the inner surface of said second web, and joining the inner surface of said second web to an outer surface of said first web and the zones of said panel extending in vicinities of its transversely opposite ends by means of adhesives applied on said first and second adhesive zones.

3. (Original) The process according to Claim 1, further including a coating first adhesive zones each continuously extending in the machine direction inside each of the transversely opposite side edges of said first web along each of the transversely opposite ends of said panel on the outer surface of said first web with adhesives while coating second adhesive zones extending in the machine direction so as to be spaced one from another by a predetermined dimension in said machine direction and extending in the cross direction said first adhesive zones to the adjacent side edges of said first web, respectively, on the outer surface of said first web, and lying between said first adhesive zone and the adjacent side edge of said first web, and joining the inner surface of said second web to the outer surface of said first web and the zones of said panel extending in vicinities of its transversely opposite ends by means of adhesives applied on said first and second adhesive zones.

4. (previously presented) The process according to Claim 2, wherein each of said adhesive zones is laid between each pair of said panels which are adjacent to each other in the machine direction.

5. (previously presented) The process according to Claim 1, wherein said liquid-absorbent laminated panel comprises a liquid-absorbent core, a liquid-pervious topsheet covering an upper surface of said core and a liquid-impervious backsheet covering a lower surface of said core, at least said topsheet.

6. (new) The process according to claim 2, wherein

in the step of coating the second adhesive zones, each pair of adjacent said second adhesive zones are spaced from each other in the machine direction by one adhesive-free zone located corresponding to one of said panel; and

in the step of joining the inner surface of said second web to the outer surface of said first web and said panel by means of said first and second adhesive zones, the folded zones of said second web are not directly bonded by any of said first and second adhesive zones to the first web in any regions that correspond to the adhesive-free zones and overlie the elastic members.

7. (new) The process according to claim 6, wherein,

in the step of coating the second adhesive zones, a width of each said adhesive-free zones as measured in the machine direction is substantially the same as that of the corresponding panel; and

in the step of joining the inner surface of said second web to the outer surface of said first web and said panel by means of said first and second adhesive zones, the adhesives in the first adhesive zones directly bond only the folded zones of said second web to the first web and the end zones of said panels.

8. (new) The process according to claim 3, wherein

in the step of coating the second adhesive zones, each pair of adjacent said second adhesive zones are spaced from each other in the machine direction by one adhesive-free zone located corresponding to one of said panel; and

in the step of joining the inner surface of said second web to the outer surface of said first web and said panel by means of said first and second adhesive zones, the folded zones of said second web are not directly bonded by any of said first and second adhesive zones to the first web in any regions that correspond to the adhesive-free zones and overlie the elastic members.

9. (new) The process according to claim 8, wherein,

in the step of coating the second adhesive zones, a width of each said adhesive-free zones as measured in the machine direction is substantially the same as that of the corresponding panel; and

in the step of joining the inner surface of said second web to the outer surface of said first web and said panel by means of said first and second adhesive zones, the adhesives in the first adhesive zones directly bond only the folded zones of said second web to the first web and the end zones of said panels.

10. (new) The process according to claim 1, wherein both said first and second webs are made from liquid-impervious or hydrophobic materials.

11. (new) A process of manufacturing disposable diapers, said process comprising the steps of:

feeding a continuous first web in a machine direction;

feeding a continuous second web in the machine direction, wherein a transverse dimension of said second web as measured in a cross direction perpendicular to the machine direction is greater than that of said first web;

placing said first and second webs upon each other so that transversely opposite lateral zones of said second web extend in the cross direction outwardly beyond transversely opposite side edges of said first web, respectively;

feeding continuous waist elastic members stretched at a predetermined ratio in said machine direction between said first and second webs, so that said elastic members extend along and are located between the transversely opposite side edges of said first web;

attaching said elastic members to at least one of facing inner surfaces of said first and second webs, and bonding the inner surfaces of said first and second webs to each other to form a composite web;

placing a plurality of absorbent panels, each of which is elongated in the cross direction, on an outer surface of said first web at regular intervals in said machine direction, and bonding said panels to the outer surface of said first web;

folding the lateral zones of said second web inwardly, in the cross direction, and along the transversely opposite side edges of said first web to cover end zones of said panels;

bonding the folded lateral zones of said second web to at least one of (i) the outer surface of said first web and (ii) the end zones of said panels, except in regions where said folded lateral zones both overlie the elastic members and extend along the adjacent end zones of said panels;

cutting said composite web along first cutting lines located between adjacent said panels to form leg holes of the diapers to be manufactured;

folding said composite web in the cross direction with said panels lying inside;

joining respective halves of said folded composite web in vicinities of second cutting lines, each of which extends in the cross direction and is located between one pair of adjacent said panels; and

cutting said folded composite web together with said elastic members along said second cutting lines to obtain individual said diapers.

12. (new) The process according to claim 11, further comprising coating adhesive material on the inner surface of said second web in the lateral zones thereof to form

first adhesive zones each extending continuously in the machine direction and along one of transversely opposite side edges of the second web, and

second adhesive zones and adhesive-free zones arranged alternately in the machine direction, wherein said second adhesive zones and adhesive-free zones are located between said first adhesive zones and the adjacent side edges of said first web, respectively;

wherein

the folded lateral zones of said second web are bonded to both (i) the outer surface of said first web and (ii) the end zones of said panels by said first adhesive zones;

the folded lateral zones of said second web are bonded to the outer surface of said first web by said second adhesive zones each of which is located between one pair of adjacent said panels; and

the folded lateral zones of said second web are bonded to neither of (i) the outer surface of said first web and (ii) the end zones of said panels in said adhesive-free zones.

13. (new) The process according to claim 11, further comprising coating adhesive material on the outer surface of said first web to form

first adhesive zones each extending continuously in the machine direction and along the end zones of said panels, and

second adhesive zones and adhesive-free zones arranged alternately in the machine direction, wherein said second adhesive zones and adhesive-free zones are located between said first adhesive zones and the adjacent side edges of said first web, respectively;

wherein

the folded lateral zones of said second web are bonded to both (i) the outer surface of said first web and (ii) the end zones of said panels by said first adhesive zones;

the folded lateral zones of said second web are bonded to the outer surface of said first web by said second adhesive zones each of which is located between one pair of adjacent said panels; and

the folded lateral zones of said second web are bonded to neither of (i) the outer surface of said first web and (ii) the end zones of said panels in said adhesive-free zones.

14. **(new)** The process according to claim 12, wherein, in the step of coating adhesive material, a width of each said adhesive-free zones as measured in the machine direction is substantially the same as that of the adjacent end zone of the corresponding panel.

15. **(new)** The process according to claim 13, wherein, in the step of coating adhesive material, a width of each said adhesive-free zones as measured in the machine direction is substantially the same as that of the adjacent end zone of the corresponding panel.

16. **(new)** The process according to claim 11, wherein both said first and second webs are made from liquid-impervious or hydrophobic materials.